

Purchasing Receipts

PO No	Supplier	Line Item No	Ref No	Rel Terms	Purchased Item	Description	For Part No	Project ID	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name	
PO040517	ACI001-VC	1	1	Net 30	MT-A513-T-3.750W0.125	ASTM A513 TYPE 5 (1020/1026) ALLOY STEEL ROUND TUBING				6/7/31/2018	6		S103075	Stock	8/16/2018	\$ 120.30 / ft	0	0	\$771.84	Acier Ouellette Inc.		
		5			MT-4140-B-2.000X4.000	Steel Bar						4		S103076	Stock	8/16/2018	\$ 82.54 / ft	0	0	\$330.17	Acier Ouellette Inc.	
		6			MT-4140-B-0.500X4.000	4140 Steel Bar 0.500 X 4.000 ; AISI 4140 STEEL BAR PER ASTM A29, AMS 6349, AMS 6382, AMS 6529, MIL-S-5626 MINIMUM ROCKWELL C = 28 RC MAXIMUM ROCKWELL C = 32 RC receive ft							4		S103077	Stock	8/16/2018	\$ 31.01 / ft	0	0	\$124.04	Acier Ouellette Inc.
		7			MT-4140-S-0.500	AISI 4140 Steel Sheet : AISI 4140 / 4142 STEEL SHEET OR PLATE MINIMUM ROCKWELL C = 28 Rc MAXIMUM ROCKWELL C = 32 Rc ASTM A829, AMS 6395						11		S103078	Stock	8/16/2018	\$ 80.34 / sf	0	0	\$892.60	Acier Ouellette Inc.	
Total:												25		26						\$1,613.60		

ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

DELIVERY - CLIENT**Copy**

CO00100857

Billed to	Shipped to	Customer N°
DART AEROSPACE LTD	DART AEROSPACE LTD	CLI0001056
Instruction	F-M	Date
1270 , ABERDEEN ST. HAWKESBURY, Ontario, K6A 1K7	, Ontario, Att : CHANTAL LAVOIE Tél.: 613-632-5200	2018/08/09
	Delivery Route	040517
	5	Eric Kaehlert
		Salesman
		Carrier
		Credit Terme
		Net 30 Days

Product Description	Weight	Qty	UM	PCS NB				Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C	OUT
1 TUBE MEC 3.750 OD X .120 (R) TME-3750120 6697 <i>1 X 6' ** CERTIFICATE **</i>	27.91	6.00	PI								
<i>LINE# 1</i>											
<i>AC18277-It-2018-07-25 Heat .813X62610 A</i>											
2 TUBE MEC 0.750 OD X .058 NS TME-0750058 40 <i>2 X 20' R/L ** CERTIFICATE **</i>	88.80	40.00	PI-\$PI								
<i>LINE# 2</i>											
<i>AC18278-JG-2018-07-26 HEAT : A719541</i>											
3 PLATE 4140 HEAT TREAT 2 NS P4140-2H 9072 <i>1 X 4" X 4' ** CERTIFICATE **</i>	108.65	1.33	PI2								
<i>HT#</i>											
<i>LINE# 5</i>											
<i>AC18279-FU-2018-08-01 HEAT : C613450 A</i>											

Copy

CO00100857

Product Description		Qty	Weight	UM	PCS NB			Internal Use Only				
					CMD	EXP	B/O	IN	I	S	C	OUT
4	PLATE 4140 HEAT TREAT 1/2 NS											
	P4140-12H											
	8509											
	1 X 4" X 4' ** CERTIFICATE **											
	HT#											
	LINE# 6											
	AC18279-FU-2018-08-01											
	HEAT 297080											
5	PLATE 4140 HEAT TREAT 1/2 NS											
	P4140-12H											
	8509											
	1 X 40" X 40" ** CERTIFICATE **											
	HT#											
	LINE# 7											
	AC18279-FU-2018-08-01											
	HEAT 297080											

Total Weight (lbs) : 479.39 NIR : R-109516-6

Conditions :

All sold and delivered materials remain the property of "Acer Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acer Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acer Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By :	Verified By :	Delivered By : 	Time : 	Date : 
				Customer's Signature 



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO040517

Supplier:	ACI001-VC Acer Ouellette Inc. 935 Boul. Du Havre Valleyfield QC J6S 5L1 Canada Phone: 800 667 4248 Fax: 450 377 5696	PO No:	PO040517
		PO Date:	7/17/18
		Due Date:	7/24/18
		Purchase Order Revision:	
		Revision Date:	
		Ship-To Contact:	Lavoie, Chantal Phone: clavoie@dartaero.com
Ship To:	1270 Aberdeen Street Hawkesbury ON K6A 1K7 Canada Phone: 613-632-5200	Via:	Ground
		Pymt Terms:	Net 30
		Freight Terms:	
		Special Comments:	quotation no sou0119261

REVISED
S

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		MT-A513-T-3.750W0.125		ASTM A513 TYPE 5 (1020/1026) ALLOY STEEL ROUND TUBING	Firmed	-	7/24/18	6 ft	6 ft	\$120.30/ft	\$721.80	
2 ✓ <i>AT</i>		MT-A513-T-0.750W0.085		A513 Seamless Alloy Steel Round Tubing 0.75"dia. x 0.085" Wall	Firmed	-	7/24/18	120 ft	0 ft	\$4.65/ft	\$558.00	
3		MT-A513-T-0.750W0.058		A513 Seamless Alloy Steel Round Tubing 0.75"dia. x 0.058" Wall : ASTM A513 TYPE 5 (1020/1026) SEAMLESS ALLOY STEEL ROUND TUBING (DOM)	Firmed	-	7/31/18	40 ft	0 ft	\$10.90/ft	\$436.00	
4		MT-HRS-S-6GA		Hot Rolled Steel Sheet 6 Gauge 0.1943"	Firmed	-	7/24/18	16 sf	0 sf	16 sf	\$7.36625/sf	\$117.86

Line Item Note: 1 pcs of 4 ft x 4 ft

5	MT-4140-B-2.000X4.000		Steel Bar	Firmed	-	7/31/18	4 ft	0 ft	4 ft	\$82.5425/ft	\$330.17
6	MT-4140-B-0.500X4.000		4140 Steel Bar 0.500 X 4.000 : AISI 4140 STEEL BAR PER ASTM A29, AMS 6349, AMS 6382, AMS 6529, MIL-S-5626 MINIMUM ROCKWELL C = 28 RC MAXIMUM ROCKWELL C = 32 RC receive ft	Firmed	-	7/24/18	4 ft	0 ft	4 ft	\$31.01/ft	\$124.04
7	MT-4140-S-0.500		AISI 4140 Steel Sheet : AISI 4140 / 4142 STEEL SHEET OR PLATE MINIMUM ROCKWELL C = 28 Rc MAXIMUM ROCKWELL C = 32 Rc ASTM A829, AMS 6395	Firmed	-	7/24/18	11.111 sf	0 sf	11 sf	\$80.34218/sf	\$892.68

Line Item Note: 1 pcs of 40" x 40"

PURCHASE ORDER

Line Item	Job	Part	Supplier Part No	Items								
				Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
8 ✓ AT		M1018R4.000		M1018R4.000 : MATERIAL: AISI 1018-1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108 receive ft	Firmed	-	7/20/18	2 ft	2 ft	2 ft	\$71.62/ft	\$143.24 AUG 02 2018
9 ✓ AT		M1018R2.750		M1018R2.750 : MATERIAL: AISI 1018-1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108	Firmed	-	7/24/18	6 ft	6 ft	6 ft	\$29.115/ft	\$174.69 AUG 02 2018
10 ✓ AT		M303R2.500		303 Round Bar 2.5" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft	Firmed	-	7/24/18	4 ft	4 ft	4 ft	\$20.50/ft	\$82.00 AUG 02 2018
11 ✓ AT		M304S11GA		304/316 0.125 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed	-	7/24/18	32 sf	0 sf	32 sf	\$15.5375/sf	\$497.20 AT 18/08/02
12 ✓ AT		M5052H32S.040		5052-H32 .040 Sheet : MATERIAL: 5052-H32 ALUMINUM SHEET AS PER QQ-A-250/8 OR AMS-QQ-A-250/8 OR AMS 4016 OR ASTM B209 receive sf	Firmed	-	7/24/18	32 sf	32 sf	32 sf	\$4.1434375/sf	\$132.59 AUG 02 2018
13 ✓ AT		M6061T6R1.250		6061-T6 Round Bar 1.250 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	-	7/24/18	20 ft	0 ft	20 ft	\$4.985/ft	\$99.70 AUG 02 2018
14 ✓ AT		MT-1144-R0.750		1144 Steel Proof Round Bar 0.750" : MATERIAL : AISI 1144 STRESSPROOF STEEL ROUND BAR ASTM A311 or UNS G11440	Firmed	-	7/31/18	24 ft	0 ft	24 ft	\$3.12/ft	\$74.88 AUG 02 2018
Line Item Note:	2 pcs of 12 ft											
15 ✓ AT		M6061T6B1.000X02.000		6061-T6 Bar 1.00 X 2.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	-	7/24/18	20 ft	0 ft	20 ft	\$8.303/ft	\$166.06 AUG 02 2018

PURCHASE ORDER

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
16 <i>AT</i>		M6061T6B0.375X0.750		6061T6 Bar .375 X .750 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed -		7/24/18	20 ft	0 ft <i>20ft</i>	20 ft	\$1.288/ft	\$25.76
17 <i>AT</i>		M6061T6B0.500X02.000		6061-T6 Bar .500 X 2.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed -		7/24/18	20 ft	0 ft <i>20ft</i>	20 ft	\$4.148/ft	\$82.96
18 <i>AT</i>		M6061T6B0.750X02.000		6061-T6 Bar .750 X 2.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed -		7/24/18	20 ft	0 ft <i>20ft</i>	20 ft	\$6.2895/ft	\$125.79
19 <i>AT</i>		M6061T6B3.000X01.500		6061-T6 Bar 3.00 X 1.50 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed -		7/24/18	12 ft	0 ft <i>12ft</i>	12 ft	\$18.043333/ft	\$216.52
20 <i>AT</i>		M6061T6S.040		6061-T6 .040 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed -		7/24/18	144 sf	0 sf <i>96sf</i>	144 sf	\$8.5069444/sf	\$1,225.00
21 <i>AT</i>		M6061T6S.080		6061-T6 .080 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed -		7/24/18	288 sf	0 sf <i>288sf</i>	288 sf	\$9.6979166/sf	\$2,793.00

Grand Total: \$9,019.94

Order Notes

CL

Order Notes**Procurement Quality Clauses**

- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)
- A026 certification of material conformance
- A041 quality management system
- A042 part notification by supplier
- A043 retention of quality documents
- A048 counterfeit parts avoidance, detection, mitigation and disposition program
- A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 7/18/18 12:53 PM dart.lavoie.chantal

CO 100857

P.O 18277

DRAFT

CERTIFICATE OF TEST

Page 01 of 01

Certification Date
25-JUL-2018

CUSTOMER ORDER NUMBER

AC00018277

Invoice Number
T132129

CUSTOMER PART NUMBER

SOLD TO: ACIER OUELLETTE INC. **SHIP TO:** ACIER OUELLETTE INC.
 DIVISION SALABERRY-DE-VALLEYFIELD DIVISION SALABERRY-DE-VALLEYFIELD
 935, BOUL DU HAVRE 935, BOUL DU HAVRE
 SALABERRY-DE- VALLEYFIELD QC J6S 5L1 SALABERRY-DE- VALLEYFIE QC J6S

Description: 1020 DOM SRA A513/5
~~3.750 OD X 3.500 ID X 6'5.0" (77.0") REMNAN Line Total. 6.4 FT~~
 HEAT: 813X62610 ITEM: 107457

Specifications:

ASTM A513 TP 5

CHEMICAL ANALYSIS

C	MN	P	S	AL	SI	CB	V
0.19	0.36	0.008	0.006	0.042	0.085	0.002	0.001
CU	MO	NI	CR	B			
0.023	0.004	0.01	0.02	0.0002			

RCPT: R273456

COUNTRY OF ORIGIN : USA

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR PSI	ULT TEN PSI	%ELONG IN 02 IN	%RED IN AREA	HARDNESS RB
	64100.0	76700.0	20.0		85

TERRY GALBRAITH

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination.

Material did not come in contact with mercury while in our possession.

We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description.



The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes.

MANAGER, CORPORATE PURCHASING

SPECIFICATION CONTROL DRAWING

REV.	1	2	3	4	5	6	7	8
A								
B								

PURCHASE MATERIAL: ASTM A513 TYPE 5(1020/1026) SEAMLESS ALLOY STEEL ROUND TUBING (DOM)

SPECIFICATION:

ASTM A513 TYPE 5

PART NUMBER: MT-A513-T-(D.DDD)W(T.TTT)

WHERE D.DDD IS OUTSIDE DIAMETER IN INCHES

WHERE T.TTT IS WALL THICKNESS IN INCHES

EG. 3/4" ROUND TUBING WITH .120" WALL THICKNESS = MT-A513-T-0.750W0.120

PART NO:

1

B

C

D

DART		A
AeroSpace Tampa Bay, Clearwater, Florida, USA		
TITLE: ASTM A513 TYPE 5 (1020/1026) ALLOY STEEL ROUND TUBING (DOM)		
PART NO: MT-A513-T		
REV: B		
7000 NO: _____		
LINE END OTHERWORDS SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS ARE IN INCHES. DIMENSIONS ARE IN INCHES. DIMENSIONS ARE IN INCHES.		
DESIGNED BY:	INITIALS AND DATE: VIA 17/12/13	
DRAWN BY:	INITIALS AND DATE: VIA 12/12/13	
CHECKED BY:	INITIALS AND DATE: ML 12/20/2013	
APPROVED BY:	INITIALS AND DATE: DF 12/20/2013	
APPROVED BY:	INITIALS AND DATE: VIA 12/20/2013	
FRACTIONS: 1/16 1/8 1/4 3/8 1/2 5/8 11/16 3/4 7/8 ANGLES: 45° 30° 60° 90° SURFACE FINISHES: X +.1		
PRINT DOCUMENTS ARE FOR INFORMATION ONLY. DO NOT USE THEM AS A SUBSTITUTION FOR WRITTEN INSTRUCTIONS. PRINT DOCUMENTS ARE FOR INFORMATION ONLY. DO NOT USE THEM AS A SUBSTITUTION FOR WRITTEN INSTRUCTIONS.		
COPYRIGHT © 2017 DART AEROSPACE LTD. THAT IT IS NOT TO BE COPIED OR REPRODUCED, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF DART AEROSPACE LTD.		
SHEET 1 OF 1		

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-AS13-73.750W0.125 PO / BATCH NO.: P0040517/5103075
 DATE: 18/08/16

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 6.416 ft
 QUANTITY INSPECTED: 6.416 ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 3.750" 0.125"
 THICKNESS RECEIVED: 3.750" 0.125"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORROSION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	<u>ASTM AS13 Type 5</u>
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	<u>HT: 813X62610</u>
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/08/16</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

Chemical certification
Certification chimique

18279N

Order Num / No. Commande AC-18279	Vendor / Fournisseur 52	Country of origin / Pay d'origine CHINA	Date 11/16/17	Heat / coulée C613450	Material ID # / No. matière
Grade / Nuance 4140 PLT	Conditions HEAT TREATED				
Shape / Forme PLT	Size / Dimension 2.000	Specifications ASTM AB29, ASTM A578 CLASS A			

Chemical composition / Analyse chimique

Carbon (C)	Silicon (Si)	Manganese (Mn)	Phosphorus (P)
Mini / maxi 0.3700 / 0.4400	0.1500 / 0.3500	0.6500 / 1.1000	0.0100 / 0.0190
Actuel % 0.390	0.260	0.930	0.020
Sulphur (S)	Chromium (Cr)	Nickel (Ni)	Molybdenum (Mo)
Mini / maxi 0.0200 / 0.0400	0.7500 / 1.2000	0.1000 / 0.2000	0.1500 / 0.2500
Actuel % 0.002	1.050	0.000	0.210
Cooper (Cu)	Vanadium (V)	Aluminum (Al)	Tungsten (W)
Mini / maxi 0.1900 / 0.2900	0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000
Actuel % 0.000	0.000	0.000	0.000
Cobalt (Co)	Titanium (Ti)		
Mini / maxi 0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000
Actuel % 0.000	0.000	0.000	0.000

Mechanical properties / Propriétés Mécaniques

Yield strength / Élasticité	Tensile / Rés. à la traction	Elongation / Allon. (%)	Red. of area / Surface (%)	RC	Surface Hd / Dureté
680.000 PSI	895.000 PSI	16.00	41.00		30 BHN

Note:

We certify that the above data has been verified and are conform to an original mill or supplier certificate supplied to us with the material

Nous certifions que les données ci haut ont été vérifier et sont conformes d'après un certificat originale qui nous a été fourni par notre fournisseur.



Prepared by: / Préparé par:

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 4142 STEEL BAR
MINIMUM ROCKWELL C = 28 RC
MAXIMUM ROCKWELL C = 32 RC

SPECIFICATION

ASTM A29, AMS 6349, AMS 6382, AMS 6529,
 MT-4140-B-T-TTTT x [W.WWW]
 WHERE "T-TTTT" = THICKNESS IN INCHES
 WHERE "W.WWW" = WIDTH IN INCHES
 EX. 400-S-6 OF BAR = MT 4140 B 1.000-6.000

ASTM D39 AMS 6310 AMS 6382 AMS 6529 MIL-S-5626 MIL-S-24093

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	17-780	17-12-13	VM	ML
B	MIN & MAX Rg CHANGED	18-523	18-01-24	VM	ML
C	AD1 AISI 4142	18-544	18-02-14	ML	ML

DART AEROSPACE		100-100-100, Ontario, Canada
ASL 4140 / 4142 STEEL BAR		
PART NO.		REV.
TOOL NO.		C
MT-4140-B		
UNLESS OTHERWISE SPECIFIED INTERPRETATION OF DRAWINGS IS BASED ON ASME Y14.5M-2009 DRAWINGS APPLIED AFTER PUBLISHING		
INITIALS AND DATE		
DESIGNED BY:	VIN	ML 02/14/2017
DRAWN BY:	ML	ML 02/14/2017
CHECKED BY:	DD	ML 02/14/2018
QC REVIEWED:	X	X
APPROVED:	X	X
DRAFTS, MTS, DART/AEROSPACE		
COPRIGHT © 2018 DART/AEROSPACE		
THIS IS A DRAWING IN 1:20 SCALE. IT HAS BEEN DRAWN AND CHECKED FOR USE IN THE MANUFACTURE OF PARTS. IT IS NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE. IT IS THE PROPERTY OF DART/AEROSPACE INC.		



SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE
MINIMUM ROCKWELL C = 28 RC
MAXIMUM ROCKWELL C = 32 RC

SPECIFICATION:

DANT WILHELD

ASTM A829 AMS 6395

MAXIMUM ROCKWELL

AISI 4140 / 4142 STEEL SHEET OR PLATE
MINIMUM ROCKWELL C = 28 RC
MAXIMUM ROCKWELL C = 32 RC

DART AEROSPACE		Newburyshire Outlets Clarendon	
AISI 4140 / 4142 STEEL SHEET OR PLATE			
PART NO:	MT-4140-S	REV:	A
TOOL NO:	LINEAR OTHER SURFACE SPECIFICATIONS NOTES: 1. ALL DIMENSIONS ARE IN INCHES. 2. TOLERANCES ARE AS PER ASME Y14.5M-2009 3. UNLESS OTHERWISE STATED, DIMENSIONS APPLY AFTER FURNISHING		
DESIGNED BY:	INITIALS AND DATE VM 2/3/2018		
DRAWN BY:	TOLERANCE VM 02/15/2018 X .030-.050		
SPECIFIED BY:	X .241		
MAQ REVIEW BY:	X .175		
APPROVED BY:	SCALE: INCHES		
	SHEET OF 1		
	COPYRIGHT © 2018 BY DART AEROSPACE LTD		
<small>THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. AND IS RESTRICTED TO USE BY DART AEROSPACE LTD. AND ITS CONTRACTORS. THIS DOCUMENT IS NOT TO BE COPIED, DISSEMINATED, OR USED OUTSIDE OF DART AEROSPACE LTD. WITHOUT THE EXPRESS WRITTEN CONSENT OF DART AEROSPACE LTD.</small>			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4/40-B-2, 20x1.00
 DATE: 18/08/16

PO / BATCH NO.: P0040517/S103076

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 4ft
 QUANTITY INSPECTED: 4ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 2.00"
 THICKNESS RECEIVED: 2.00'
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <u>(N)</u>	
CORRECT FINISH	Y <u>(N)</u>	
CORROSION	Y <u>(N)</u>	
CORRECT GRAIN DIRECTION	Y <u>(N)</u>	
CORRECT MATERIAL PER M-DRAWING	Y <u>(N)</u>	<u>A52M 4829</u>
CORRECT THICKNESS	Y <u>(N)</u>	
PHOTO REQUIRED	Y <u>(N)</u>	
CORRECT REF # TO LINK CERT	Y <u>(N)</u>	<u>HT: C613450</u>
CORRECT MATERIAL IDENTIFICATION	Y <u>(N)</u>	
CORRECT M# ON THE MATERIAL	Y <u>(N)</u>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <u>(N)</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <u>(N)</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/08/16</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

18279N

Chemical certification
Certification chimique

10852
Dart.

Order Num / No. Commande AC-18279	Vendor / Fournisseur 45	Country of origin / Pay d'origine SLOVENIA	Date 09/10/16	Heat / coulée 297080	Material ID # / No. matière
Grade / Nuance 4140 PLT	Conditions HEAT TREATED Q&T E + VD				
Shape / Forme FLT	Size / Dimension 0.500	Specifications ASTM A829/A829M			

Chemical composition / Analyse chimique

Carbon (C)	Silicon (Si)	Manganese (Mn)	Phosphorus (P)
Mini / maxi 0.3700 / 0.4400	0.1500 / 0.3500	0.6500 / 1.1000	0.0100 / 0.0190
Actuel % 0.430	0.224	0.783	0.007
Sulphur (S)	Chromium (Cr)	Nickel (Ni)	Molybdenum (Mo)
Mini / maxi 0.0200 / 0.0400	0.7500 / 1.2000	0.1000 / 0.2000	0.1500 / 0.2500
Actuel % 0.001	0.960	0.130	0.160
Cooper (Cu)	Vanadium (V)	Aluminum (Al)	Tungsten (W)
Mini / maxi 0.1900 / 0.2900	0.0400 / 0.0500	0.0090 / 0.0190	0.0000 / 0.0000
Actuel % 0.244	0.039	0.015	0.000
Cobalt (Co)	Titanium (Ti)		
Mini / maxi 0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000
Actuel % 0.000	0.000	0.000	0.000

Mechanical properties / Propriétés Mécaniques

Yield strength / Élasticité	Tensile / Rés. à la traction	Elongation / Allon. (%)	Red. of area / Surface (%)	RC	Surface Hd / Dureté
0.000	PSI	0.000	PSI	0.00	284

Note:

We certify that the above data has been verified and are conform to an original mill or supplier certificate supplied to us with the material

Nous certifions que les données ci haut ont été vérifier et sont conformes d'après un certificat originale qui nous a été fourni par notre fournisseur.

MJ

Prepared by: / Préparé par:

SPECIFICATION CONTROL DRAWING

			REV.					
					DESCRIPTION		ECN #	DATE APPROVED
A					NEW ISSUE		17-780	17/12/13 VM ML
B					MIN & MAX Rc CHANGED		18-323	18/01/24 VM ML
C					ADD AISI 4142		18-544	18/02/14 ML ML

PURCHASE MATERIAL : AISI 4140 / 4142 STEEL BAR
 MINIMUM ROCKWELL C = 28 Rc
 MAXIMUM ROCKWELL C = 32 Rc

SPECIFICATION: ASTM A29, AMS 6349, AMS 6382, AMS 6529, MIL-S-5626, MIL-S-24093

PART NUMBER: MT-4140-B-[T.TTT]x[W.WWW]
 WHERE "T.TTT" = THICKNESS IN INCHES
 WHERE "W.WWW" = WIDTH IN INCHES

EX. 4.0" x 6.0" BAR = MT-4140-B-4.00x6.000

D	C		B
A			
DART AEROSPACE <small>Montreal, Quebec, Canada</small>			
AISI 4140 / 4142 STEEL BAR			
PART NO:	MT-4140-B	REV:	C
<small>Tool No.: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. INTERPRET DRAWINGS ACCORDING TO ASME Y14.5M-2009 DRAWINGS APPLIED AFTER THIS REISSUE.</small>			
<small>INITIALS AND DATE: DESIGNED BY: VM 12/13/2017 DRAWN BY: ML 02/14/2018 CHECKED BY: VM 02/14/2018 MFG REVIEWED: DD 02/14/2018 APPROVED BY: ML 02/14/2018</small>			
<small>FRACTIONS: 1/8 1/4 3/8 5/16 7/16 1/2 9/16 5/8 11/16 13/16 7/8 15/16 17/16 19/16 21/16 23/16 25/16 27/16 29/16 31/16 33/16 35/16 37/16 39/16 41/16 43/16 45/16 47/16 49/16 51/16 53/16 55/16 57/16 59/16 61/16 63/16 65/16 67/16 69/16 71/16 73/16 75/16 77/16 79/16 81/16 83/16 85/16 87/16 89/16 91/16 93/16 95/16 97/16 99/16 101/16 103/16 105/16 107/16 109/16 111/16 113/16 115/16 117/16 119/16 121/16 123/16 125/16 127/16 129/16 131/16 133/16 135/16 137/16 139/16 141/16 143/16 145/16 147/16 149/16 151/16 153/16 155/16 157/16 159/16 161/16 163/16 165/16 167/16 169/16 171/16 173/16 175/16 177/16 179/16 181/16 183/16 185/16 187/16 189/16 191/16 193/16 195/16 197/16 199/16 201/16 203/16 205/16 207/16 209/16 211/16 213/16 215/16 217/16 219/16 221/16 223/16 225/16 227/16 229/16 231/16 233/16 235/16 237/16 239/16 241/16 243/16 245/16 247/16 249/16 251/16 253/16 255/16 257/16 259/16 261/16 263/16 265/16 267/16 269/16 271/16 273/16 275/16 277/16 279/16 281/16 283/16 285/16 287/16 289/16 291/16 293/16 295/16 297/16 299/16 301/16 303/16 305/16 307/16 309/16 311/16 313/16 315/16 317/16 319/16 321/16 323/16 325/16 327/16 329/16 331/16 333/16 335/16 337/16 339/16 341/16 343/16 345/16 347/16 349/16 351/16 353/16 355/16 357/16 359/16 361/16 363/16 365/16 367/16 369/16 371/16 373/16 375/16 377/16 379/16 381/16 383/16 385/16 387/16 389/16 391/16 393/16 395/16 397/16 399/16 401/16 403/16 405/16 407/16 409/16 411/16 413/16 415/16 417/16 419/16 421/16 423/16 425/16 427/16 429/16 431/16 433/16 435/16 437/16 439/16 441/16 443/16 445/16 447/16 449/16 451/16 453/16 455/16 457/16 459/16 461/16 463/16 465/16 467/16 469/16 471/16 473/16 475/16 477/16 479/16 481/16 483/16 485/16 487/16 489/16 491/16 493/16 495/16 497/16 499/16 501/16 503/16 505/16 507/16 509/16 511/16 513/16 515/16 517/16 519/16 521/16 523/16 525/16 527/16 529/16 531/16 533/16 535/16 537/16 539/16 541/16 543/16 545/16 547/16 549/16 551/16 553/16 555/16 557/16 559/16 561/16 563/16 565/16 567/16 569/16 571/16 573/16 575/16 577/16 579/16 581/16 583/16 585/16 587/16 589/16 591/16 593/16 595/16 597/16 599/16 601/16 603/16 605/16 607/16 609/16 611/16 613/16 615/16 617/16 619/16 621/16 623/16 625/16 627/16 629/16 631/16 633/16 635/16 637/16 639/16 641/16 643/16 645/16 647/16 649/16 651/16 653/16 655/16 657/16 659/16 661/16 663/16 665/16 667/16 669/16 671/16 673/16 675/16 677/16 679/16 681/16 683/16 685/16 687/16 689/16 691/16 693/16 695/16 697/16 699/16 701/16 703/16 705/16 707/16 709/16 711/16 713/16 715/16 717/16 719/16 721/16 723/16 725/16 727/16 729/16 731/16 733/16 735/16 737/16 739/16 741/16 743/16 745/16 747/16 749/16 751/16 753/16 755/16 757/16 759/16 761/16 763/16 765/16 767/16 769/16 771/16 773/16 775/16 777/16 779/16 781/16 783/16 785/16 787/16 789/16 791/16 793/16 795/16 797/16 799/16 801/16 803/16 805/16 807/16 809/16 811/16 813/16 815/16 817/16 819/16 821/16 823/16 825/16 827/16 829/16 831/16 833/16 835/16 837/16 839/16 841/16 843/16 845/16 847/16 849/16 851/16 853/16 855/16 857/16 859/16 861/16 863/16 865/16 867/16 869/16 871/16 873/16 875/16 877/16 879/16 881/16 883/16 885/16 887/16 889/16 891/16 893/16 895/16 897/16 899/16 901/16 903/16 905/16 907/16 909/16 911/16 913/16 915/16 917/16 919/16 921/16 923/16 925/16 927/16 929/16 931/16 933/16 935/16 937/16 939/16 941/16 943/16 945/16 947/16 949/16 951/16 953/16 955/16 957/16 959/16 961/16 963/16 965/16 967/16 969/16 971/16 973/16 975/16 977/16 979/16 981/16 983/16 985/16 987/16 989/16 991/16 993/16 995/16 997/16 999/16 1001/16 1003/16 1005/16 1007/16 1009/16 1011/16 1013/16 1015/16 1017/16 1019/16 1021/16 1023/16 1025/16 1027/16 1029/16 1031/16 1033/16 1035/16 1037/16 1039/16 1041/16 1043/16 1045/16 1047/16 1049/16 1051/16 1053/16 1055/16 1057/16 1059/16 1061/16 1063/16 1065/16 1067/16 1069/16 1071/16 1073/16 1075/16 1077/16 1079/16 1081/16 1083/16 1085/16 1087/16 1089/16 1091/16 1093/16 1095/16 1097/16 1099/16 1101/16 1103/16 1105/16 1107/16 1109/16 1111/16 1113/16 1115/16 1117/16 1119/16 1121/16 1123/16 1125/16 1127/16 1129/16 1131/16 1133/16 1135/16 1137/16 1139/16 1141/16 1143/16 1145/16 1147/16 1149/16 1151/16 1153/16 1155/16 1157/16 1159/16 1161/16 1163/16 1165/16 1167/16 1169/16 1171/16 1173/16 1175/16 1177/16 1179/16 1181/16 1183/16 1185/16 1187/16 1189/16 1191/16 1193/16 1195/16 1197/16 1199/16 1201/16 1203/16 1205/16 1207/16 1209/16 1211/16 1213/16 1215/16 1217/16 1219/16 1221/16 1223/16 1225/16 1227/16 1229/16 1231/16 1233/16 1235/16 1237/16 1239/16 1241/16 1243/16 1245/16 1247/16 1249/16 1251/16 1253/16 1255/16 1257/16 1259/16 1261/16 1263/16 1265/16 1267/16 1269/16 1271/16 1273/16 1275/16 1277/16 1279/16 1281/16 1283/16 1285/16 1287/16 1289/16 1291/16 1293/16 1295/16 1297/16 1299/16 1301/16 1303/16 1305/16 1307/16 1309/16 1311/16 1313/16 1315/16 1317/16 1319/16 1321/16 1323/16 1325/16 1327/16 1329/16 1331/16 1333/16 1335/16 1337/16 1339/16 1341/16 1343/16 1345/16 1347/16 1349/16 1351/16 1353/16 1355/16 1357/16 1359/16 1361/16 1363/16 1365/16 1367/16 1369/16 1371/16 1373/16 1375/16 1377/16 1379/16 1381/16 1383/16 1385/16 1387/16 1389/16 1391/16 1393/16 1395/16 1397/16 1399/16 1401/16 1403/16 1405/16 1407/16 1409/16 1411/16 1413/16 1415/16 1417/16 1419/16 1421/16 1423/16 1425/16 1427/16 1429/16 1431/16 1433/16 1435/16 1437/16 1439/16 1441/16 1443/16 1445/16 1447/16 1449/16 1451/16 1453/16 1455/16 1457/16 1459/16 1461/16 1463/16 1465/16 1467/16 1469/16 1471/16 1473/16 1475/16 1477/16 1479/16 1481/16 1483/16 1485/16 1487/16 1489/16 1491/16 1493/16 1495/16 1497/16 1499/16 1501/16 1503/16 1505/16 1507/16 1509/16 1511/16 1513/16 1515/16 1517/16 1519/16 1521/16 1523/16 1525/16 1527/16 1529/16 1531/16 1533/16 1535/16 1537/16 1539/16 1541/16 1543/16 1545/16 1547/16 1549/16 1551/16 1553/16 1555/16 1557/16 1559/16 1561/16 1563/16 1565/16 1567/16 1569/16 1571/16 1573/16 1575/16 1577/16 1579/16 1581/16 1583/16 1585/16 1587/16 1589/16 1591/16 1593/16 1595/16 1597/16 1599/16 1601/16 1603/16 1605/16 1607/16 1609/16 1611/16 1613/16 1615/16 1617/16 1619/16 1621/16 1623/16 1625/16 1627/16 1629/16 1631/16 1633/16 1635/16 1637/16 1639/16 1641/16 1643/16 1645/16 1647/16 1649/16 1651/16 1653/16 1655/16 1657/16 1659/16 1661/16 1663/16 1665/16 1667/16 1669/16 1671/16 1673/16 1675/16 1677/16 1679/16 1681/16 1683/16 1685/16 1687/16 1689/16 1691/16 1693/16 1695/16 1697/16 1699/16 1701/16 1703/16 1705/16 1707/16 1709/16 1711/16 1713/16 1715/16 1717/16 1719/16 1721/16 1723/16 1725/16 1727/16 1729/16 1731/16 1733/16 1735/16 1737/16 1739/16 1741/16 1743/16 1745/16 1747/16 1749/16 1751/16 1753/16 1755/16 1757/16 1759/16 1761/16 1763/16 1765/16 1767/16 1769/16 1771/16 1773/16 1775/16 1777/16 1779/16 1781/16 1783/16 1785/16 1787/16 1789/16 1791/16 1793/16 1795/16 1797/16 1799/16 1801/16 1803/16 1805/16 1807/16 1809/16 1811/16 1813/16 1815/16 1817/16 1819/16 1821/16 1823/16 1825/16 1827/16 1829/16 1831/16 1833/16 1835/16 1837/16 1839/16 1841/16 1843/16 1845/16 1847/16 1849/16 1851/16 1853/16 1855/16 1857/16 1859/16 1861/16 1863/16 1865/16 1867/16 1869/16 1871/16 1873/16 1875/16 1877/16 1879/16 1881/16 1883/16 1885/16 1887/16 1889/16 1891/16 1893/16 1895/16 1897/16 1899/16 1901/16 1903/16 1905/16 1907/16 1909/16 1911/16 1913/16 1915/16 1917/16 1919/16 1921/16 1923/16 1925/16 1927/16 1929/16 1931/16 1933/16 1935/16 1937/16 1939/16 1941/16 1943/16 1945/16 1947/16 1949/16 1951/16 1953/16 1955/16 1957/16 1959/16 1961/16 1963/16 1965/16 1967/16 1969/16 1971/16 1973/16 1975/16 1977/16 1979/16 1981/16 1983/16 1985/16 1987/16 1989/16 1991/16 1993/16 1995/16 1997/16 1999/16 2001/16 2003/16 2005/16 2007/16 2009/16 2011/16 2013/16 2015/16 2017/16 2019/16 2021/16 2023/16 2025/16 2027/16 2029/16 2031/16 2033/16 2035/16 2037/16 2039/16 2041/16 2043/16 2045/16 2047/16 2049/16 2051/16 2053/16 2055/16 2057/16 2059/16 2061/16 2063/16 2065/16 2067/16 2069/16 2071/16 2073/16 2075/16 2077/16 2079/16 2081/16 2083/16 2085/16 2087/16 2089/16 2091/16 2093/16 2095/16 2097/16 2099/16 2101/16 2103/16 2105/16 2107/16 2109/16 2111/16 2113/16 2115/16 2117/16 2119/16 2121/16 2123/16 2125/16 2127/16 2129/16 2131/16 2133/16 2135/16 2137/16 2139/16 2141/16 2143/16 2145/16 2147/16 2149/16 2151/16 2153/16 2155/16 2157/16 2159/16 2161/16 2163/16 2165/16 2167/16 2169/16 2171/16 2173/16 2175/16 2177/16 2179/16 2181/16 2183/16 2185/16 2187/16 2189/16 2191/16 2193/16 2195/16 2197/16 2199/16 2201/16 2203/16 2205/16 2207/16 2209/16 2211/16 2213/16 2215/16 2217/16 2219/16 2221/16 2223/16 2225/16 2227/16 2229/16 2231/16 2233/16 2235/16 2237/16 2239/16 2241/16 2243/16 2245/16 2247/16 2249/16 2251/16 2253/16 2255/16 2257/16 2259/16 2261/16 2263/16 2265/16 2267/16 2269/16 2271/16 2273/16 2275/16 2277/16 2279/16 2281/16 2283/16 2285/16 2287/16 2289/16 2291/16 2293/16 2295/16 2297/16 2299/16 2301/16 2303/16 2305/16 2307/16 2309/16 2311/16 2313/16 2315/16 2317/16 2319/16 2321/16 2323/16 2325/16 2327/16 2329/16 2331/16 2333/16 2335/16 2337/16 2339/16 2341/16 2343/16 2345/16 2347/16 2349/16 2351/16 2353/16 2355/16 2357/16 2359/16 2361/16 2363/16 2365/16 2367/16 2369/16 2371/16 2373/16 2375/16 2377/16 2379/16 2381/16 2383/16 2385/16 2387/16 2389/16 2391/16 2393/16 2395/16 2397/16 2399/16 2401/16 2403/16 2405/16 2407/16 2409/16 2411/16 2413/16 2415/16 2417/16 2419/16 2421/16 2423/16 2425/16 2427/16 2429/16 2431/16 2433/16 2435/16 2437/16 2439/16 2441/16 2443/16 2445/16 2447/16 2449/16 2451/16 245</small>			

SPECIFICATION CONTROL DRAWING

1	2	3	4	5	6	7	8
A	REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED	
A		NEW ISSUE	18-544	18-2-13	VM	ML	

D

C

B

PURCHASE MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE
 MINIMUM ROCKWELL C = 28 Rc
 MAXIMUM ROCKWELL C = 32 Rc

SPECIFICATION:

ASTM A629 / AMS 6395

PART NUMBER:

MT-4140-S-[T].[TTT] X [W].[WWW]
 WHERE "T.[TTT]" = THICKNESS IN INCHES
 WHERE "W.[WWW]" = WIDTH IN INCHES (OPTIONAL FOR SPECIFYING CUT PLATE)

EX. 0.063" THICK SHEET = MT-4140-S-0.063
 EX. 3.5" WIDE BY 0.500" THICK PLATE = MT-4140-S-0.500X3.500

DART AEROSPACE		Waterloo, Ontario, Canada	
AISI 4140 / 4142 STEEL SHEET OR PLATE			
PART NO.	MT-4140-S	REV A	
TOOL NO. _____			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. AFTER PUNCHING, TOLERANCES: LENGTHS, ± .015"; THICKNESSES, ± .005"; RADII, ± .015". FRACTIONS: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 17/16", 19/16", 21/16", 23/16", 25/16", 27/16", 29/16", 31/16", 33/16", 35/16", 37/16", 39/16", 41/16", 43/16", 45/16", 47/16", 49/16", 51/16", 53/16", 55/16", 57/16", 59/16", 61/16", 63/16", 65/16", 67/16", 69/16", 71/16", 73/16", 75/16", 77/16", 79/16", 81/16", 83/16", 85/16", 87/16", 89/16", 91/16", 93/16", 95/16", 97/16", 99/16", 101/16", 103/16", 105/16", 107/16", 109/16", 111/16", 113/16", 115/16", 117/16", 119/16", 121/16", 123/16", 125/16", 127/16", 129/16", 131/16", 133/16", 135/16", 137/16", 139/16", 141/16", 143/16", 145/16", 147/16", 149/16", 151/16", 153/16", 155/16", 157/16", 159/16", 161/16", 163/16", 165/16", 167/16", 169/16", 171/16", 173/16", 175/16", 177/16", 179/16", 181/16", 183/16", 185/16", 187/16", 189/16", 191/16", 193/16", 195/16", 197/16", 199/16", 201/16", 203/16", 205/16", 207/16", 209/16", 211/16", 213/16", 215/16", 217/16", 219/16", 221/16", 223/16", 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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4/140.3 - 0.500x4.000
 DATE: 18/08/16

PO / BATCH NO.: P0040517/S103077

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 4ft
 QUANTITY INSPECTED: 4ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500"
 THICKNESS RECEIVED: 0.500"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<u>Y</u> <u>N</u>	
CORRECT FINISH	<u>Y</u> <u>N</u>	
CORROSION	<u>Y</u> <u>N</u>	
CORRECT GRAIN DIRECTION	<u>Y</u> <u>N</u>	
CORRECT MATERIAL PER M-DRAWING	<u>Y</u> <u>N</u>	<u>A324 A824</u>
CORRECT THICKNESS	<u>Y</u> <u>N</u>	
PHOTO REQUIRED	<u>Y</u> <u>N</u>	
CORRECT REF # TO LINK CERT	<u>Y</u> <u>N</u>	<u>HT: 297080</u>
CORRECT MATERIAL IDENTIFICATION	<u>Y</u> <u>N</u>	
CORRECT M# ON THE MATERIAL	<u>Y</u> <u>N</u>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<u>Y</u> <u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<u>Y</u> <u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/08/16</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

1	2	3	4	5	6	7	8	
REV.		DESCRIPTION		ECN #		DATE		APPROVED
A		NEW ISSUE		18-544		16.2.13		M.L.

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE
 MINIMUM ROCKWELL C = 28 Rc
 MAXIMUM ROCKWELL C = 32 Rc

(C) ASTM A829, AMS 6395

SPECIFICATION:

PART NUMBER:

MT-4140-S-[T].[TTT] x [W].[WWW]
 WHERE "T.TTT" = THICKNESS IN INCHES
 WHERE "W.WWW" = WIDTH IN INCHES (OPTIONAL FOR SPECIFYING CUT PLATE)

EX. 0.063" THICK SHEET T = MT-4140-S-0.063
 EX. 3.5" WIDE BY 0.500" THICK PLATE = MT-4140-S-0.500x3.500

<div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: white; opacity:

SPECIFICATION CONTROL DRAWING

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4140-S-0.500
 DATE: 18/08/16

PO / BATCH NO.: P0040517/S102078

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 11.115 ft
 QUANTITY INSPECTED: 11.115 ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500"
 THICKNESS RECEIVED: 0.500"
 SHEET SIZE ORDERED: 40" x 40"
 SHEET SIZE RECEIVED: 40" x 40"

DESCRIPTION	NCR (Check Y/N)		COMMENTS
	Y	N	
SURFACE DAMAGE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>ASTM A829</i>
CORRECT THICKNESS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>HT:297080</i>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>A1</u>	SIGNED OFF BY: _____
DATE: <u>18/08/16</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in